# Veterinary Diagnostic Laboratory

# State of the Veterinary Diagnostic Laboratory at Iowa State University

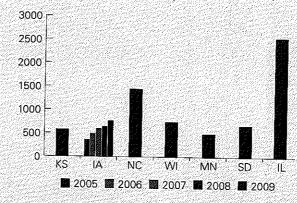
February 1, 2008

- Since 1947, the Veterinary Diagnostic Laboratory at ISU
   (ISU VDL) has worked closely with the Iowa Department
   of Agriculture and Land Stewardship, Iowa veterinarians
   and livestock producers to provide the first line of defense
   against livestock diseases through veterinary diagnostic
   services, surveillance testing and applied research.
- The VDL receives 45,000-48,000 case submissions per year from producers through their local veterinarians.
- Submissions reflect the make up of Iowa's animal agriculture with swine and beef being the highest, followed by dairy, poultry, small ruminants, equine and companion animals.
- The feed, grain and biofuels industries are also served by testing done on livestock diets.
- Twenty-five faculty and 92 staff work in the VDL. Most faculty have 70-100% commitment to service with less commitment to research and teaching. Staff are essentially 100% committed to providing diagnostic service.
- State dollars appropriated to veterinary diagnostic services in Iowa are substantially lower than what peer states (Illinois, Kansas, South Dakota, Michigan, North Carolina) have invested based on a 2005 study mandated by the Iowa Legislature (HF816) that determined \$4 million was needed to adequately support the VDL services. As such, the VDL at ISU has become heavily reliant (65% of the budget) on fee income. This heavy reliance on fee income drives VDLs to only offer tests that are profitable for the lab rather than those that may be best for the industry.
- The Iowa Legislature is in the process of addressing this issue. \$1 million in recurring dollars was appropriated for the Veterinary Diagnostic Lab in FY2007 and \$2 million in FY2008 with intent language to appropriate \$3 million in FY2009 and \$4 million in FY2010 (2007 Iowa Code 211, sections 24 and 25). This legislation is strongly supported by the IVMA, ISDA, ICA, IPPA, IPA, and Iowa Farm Bureau.
- The VDL at ISU has invested the appropriations to sustain diagnostic services available to Iowa producers, and to improve the quality, and expand the scope of these services.

- Year #1 and #2 (FY07-08): Funding was used to build a sustainable infrastructure of essential people (i.e. technicians, clinicians), programs (i.e. quality assurance) and equipment to ensure continuation of high quality and affordable diagnostic services. The VDL strategically expanded certain diagnostic programs (i.e. avian influenza testing for poultry, Johne's and BVD testing for cattle, circovirus testing for pigs), enhanced quality assurance programs to assure reaccreditation of the laboratory, and developed several new programs such as corn co-product testing, molecular testing for PRRS virus and swine influenza, and real-time health monitoring through saliva testing of pig herds.
- Year #3 and #4 (FY09 and FY10): The VDL will invest future funding into improving efficiency and accuracy of tests by implementing new technology that improves case throughput (i.e. robotics) and test sensitivity and specificity (i.e. multiplex molecular assays), build the research infrastructure to develop the next generation diagnostic assays, and expand the laboratory information management system to deliver value-added customer reports and capture diagnostic and treatment outcome data that will be used to establish best practices to keep Iowa agriculture globally competitive.
- In addition to their service roles, VDL faculty were engaged in approximately \$5.4 million in research grants in FY07.
   Focus areas included development of better tests for diagnosis of diseases, development and licensing of new vaccines (circovirus), discovery of new diseases and disease manifestations, assessment of aerosol transmission of diseases, interventions to address pre-harvest food safety and other areas.
- Access to affordable, high quality, timely veterinary diagnostic testing is essential for livestock producers to minimize the impact of disease and stop disease transmission to other Iowa producers.
- High quality, broad scope veterinary diagnostic services provide a sound return on investment of lowa resources.

\$4 Million Direct Recurring Appropriation to the Veterinary Diagnostic Laboratory (VDL) at lowa State University is Necessary and Justified

### State Dollars Allocated to VDLs Per Million Dollars of Value in Animal Agriculture (Assumes no increase in funding for peer state VDLs)



- 2005 Iowa Legislature mandated a comparative study of six other VDLs
- Study results: ISU VDL was substantially underfunded compared to peers; more heavily reliant on fees.
- 2007 Iowa Code Chapter
  211: Section 24 designated
  \$2 million direct appropriation;
- Section 25 established intent for \$3 million in FY09 and \$4 million recurring direct appropriation in FY10

### **Veterinary Diagnostic Laboratory**

- lowa's only public veterinary diagnostic laboratory (VDL)
- lowas only VDL accredited by the American Association of Veterinary Laboratory Diagnosticians
- Processes 45,000 50,000 cases from livestock producers annually
- Conducts more than 1.3 million tests annually
- Provides timely, <u>comprehensive</u>, high quality diagnoses for diseases and toxicoses

## \$4 Million Direct Appropriation is Necessary to...

- Continue to provide unbiased, critical diagnostic services to meet the needs of lowa animal owners
- Position lowa to continue to participate in national animal health networks and surveillance programs
- Be prepared to detect and quickly respond to introduction of a foreign animal disease
- Provide the research infrastructure to be the leader in food animal diagnostic medicine.
- Position Iowa as a leader in <u>establishing best</u>
   <u>practices</u> for safe and profitable food production

Justified based on the importance of lowa's more than \$8 billion animal agriculture industry.

A 1% production increase = \$80 million impact!